

work order! - EE/BTP/KRIDL/W.O/260/12-13 D. 21.01.13

Job Code! - 008-12-000085, **M.A.R. 57 (Rule 116)**

Measurement Book

No. A/11 **193301**

Serial No. First 2 part bill ①

Name of work Improvements of drainage and asphalting to main road
and cross roads in ward no. 2, Kogelali sub division

Name of Contractor of nature of Agency Technical manager (West) KRIDL, Bangalore

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
①	Earth work excavation by manual means in hard soil involving an average horizontal throw up to 2 meters and an average depth up to 0.5 m excavated surface leveled sides neatly dressed the disposed earth to be leveled neatly after breaking of clods cut concrete as per the specification. Qty B/F from P.NO 193385 of this MB is... 801.30 cum Qty limited to 801.00 @ Rs 81.00/cum						64,881.00

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
1) 9/11	2) Removing B.S slab of drain and stalling cut complete as per specification, Qty B/F from P.NO 193339 of this MBIS 5065.20 sqm RM 44.70 / sqm						2,26,414=00
2) 9/11	3) Re-fixing of stone slabs of drains and pointing in cm (1:3) cut complete Qty B/F from P.NO 193339 1/2 of this MBIS... 5065.20 sqm RM 63.00 / sqm						3,19,108=00
19/11	4) Earth work Excavation and forming for ear- bankment by manual means in hard soil with						

Serial No.....

Name of work.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2
	Initial lead up to breaking of close and level for complete as Qty B/F from P.NO 193339 1/2 of this MBIS... 5065.20 sqm RM 63.00 / sqm
	5) Dismantling of C PCC work in

OK

th	Depth 6	Contents 7	Reference to last Measurement 8
and stacking station.			
this m/s	5065.20	5m	
to / 5m			2,26,414=00
drains and complete			
m/s...	5065.20	5m	
/ 5m			3,13,108=00
forming in ear in hard soil with			

M.A.R. 57 (Rule 116)

Measurement Book

No. A/11

193302

Serial No.....

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	Initial lead up to 15m and lift of 1.5m including breaking of clods spreading to required line and level forming and cost of all labour complete as per specification and complete atg B/F from P.NO 193344/2 of this m/s.... @ Rs 112.32/cum					4465.00 cum	5,01,459=00
	5) Dismantling of cement concrete flooring on PCC work including removing and conveying						

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	the debris to distance up to 200m and cover plate as per specification. Qty B/F from P.NO 193345/2 of this MB is --- 375.60 sqm Qty limited to 375.00 sqm @ Rs 38.88/sqm 14,580.00						
	6) providing granite slabs of selected du- ality roughly dressed and fixed in cement mortar (1:6) including fixing curing and complete work as per specification. Qty B/F from P.NO 193347/2 of this MB is --- 1883.30 sqm @ Rs 315.36/sqm 5,93,917.00						
	7) scarifying for bituminous surface or surface						

Serial No.....

Name of work.....

Name of Contractor or nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	
	dressing or pre- up scarified and viable material by manual un- aid labour ch- to specification Qty B/F from P.NO 193347/2 of this MB is --- 1883.30 sqm @ Rs 315.36/sqm 5,93,917.00	
	8) providing large	

K

Depth 6	Contents 7	Reference to last Measurement 8
2.00m	red colour	
3.15	375.60 sqm	14,580.00
2.88/sqm		
selected du		
fixed in cement		
cutting at complete		
MB 18..	1883.30 sqm	5,93,917.00
2m		
surface or surface		

M.A.R. 57 (Rule 116)

Measurement Book

No. A/11

193303

Serial No.....

Name of work.....From.....To.....

Name of Contractor or nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	dressing on premix carpet including pickup up scabbled materials stalling of all ser- viceable materials within limit of 100m by manual means including cost of all labour charges etc complete as per the specification. Qty B/F from P.NO 193348/2 of thick MB is... 1650.00 sqm @ 17.93/sqm						29,585.00
8)	providing laying spreading and work						

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	putting graded stone aggregate to well mix macadam specifications including pre mixing the material with water at one in mechanical mix plant carriage of mixed material of tipper to site laying in uniform layers with power in sub base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density completely per the specification. Qty B/F from P.O 193354/2 of this MB 18 2467.95 cum @ 1053.42 / cum 26,14,744=00						
	9) providing and applying primer coat with						

M.A

Serial No.....

Name of work.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Number 3
	bitumen emulsion of granular base surface and of 0.60 kg / sqm complete of Qty B/F from P.NO	
	10) providing and	

BOOK

Breadth 5	Depth 6	Contents	Reference to last Measurement 8
		7	
		regate to road	
		along including	
		with water along	
		carriage of mixed	
		laying in uniform	
		on base / base course	
		surface and on	
		roller to	
		by complete	
0.18		2467.95 cum	
0.18		26,147.44 = 00	
		ner coat with	

M.A.R. 57 (Rule 116)

Measurement Book

No. A/11 193304

Serial No.....

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per the specification, Qty B/F from P.NO 193360/2 of this MB 18-- CM 33.64 / sqm					13165.00 sqm 5,21,861 = 00	
10)	providing and laying SDBC 25mm twice						

MEASUREMENT BOOK

MEASUREMENT							
Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
1		3	Length	Breadth	Depth		
	with 100-120 TPH batch type HMP producing an average out put of 35 tonnes per hour using crushed aggregates of specified grading premixed with bituminous binder at 5% of mix and filler transporting the hot mix to work site laying with a heavy static power roller with sensor control to achieve required grade level and complete as per the specification						
	Shadrapalay 0-30	1 ✓	30.00	$\frac{6.7+5.3}{2}$	0.025	4.69	
	out Marathalli nagare main road. 30-60	1 ✓	30.00	$\frac{5.8+5.5}{2}$	0.025	4.24	
	60-90	1 ✓	30.00	5.50	0.025	4.13	
	90-120	1 ✓	30.00	$\frac{5.5+6.1}{2}$	0.025	4.35	

M.A.F

Me

Serial No.....

Name of work.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Number 3
	120-150	1 ✓
	150-180	1 ✓
	180-210	1 ✓
	210-240	1 ✓
	240-270	1 ✓
	270-300	1 ✓
	300-325	1 ✓
	Cross road 0-30	1 ✓

BOOK

Dimensions		Contents	Reference to last Measurement
Breadth	Depth		
5	6	7	8
pe tarp producing			
tonnes per hour			
of specified grade			
continuous work at			
transporting the			
along with a hydro			
with sensor can			
be level and			
specification			
$\frac{6.7+5.3}{2}$	0.025	4.69	
$\frac{5.8+5.5}{2}$	0.025	4.24	
5.50	0.025	4.13	
$\frac{5.5+6.1}{2}$	0.025	4.35	

M.A.R. 57 (Rule 116)

Measurement Book

No. A/11

193305

Serial No.....

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date	Full description, etc, of work	Dimensions				Contents	Reference to last Measurement
		Number	Length	Breadth	Depth		
1	2	3	4	5	6	7	8
	120-150	1	30.00	$\frac{6.1+7.0}{2}$	0.025	4.91	
	150-180	1	30.00	$\frac{7.0+6.8}{2}$	0.025	5.18	
	180-210	1	30.00	$\frac{6.8+6.6}{2}$	0.025	5.03	
	210-240	1	30.00	6.60	0.025	4.95	
	240-270	1	30.00	$\frac{6.6+6.45}{2}$	0.025	4.89	
	270-300	1	30.00	$\frac{6.45+6.6}{2}$	0.025	4.89	
	300-325	1	23.00	$\frac{6.6+6.2}{2}$	0.025	3.68	
	cross road 0-30	1	30.00	$\frac{3.4+4.4}{2}$	0.025	2.93	

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	30-60	1 ✓	30.00	$\frac{4.4+4.6}{2}$	0.025	3.32	
	60-86.00	1 ✓	26.00	$\frac{4.6+5.5}{2}$	0.025	3.28	
	cross road 0-30	1 ✓	30.00	$\frac{5.5+4.8}{2}$	0.025	3.86	
	30-60	1 ✓	30.00	$\frac{4.8+5.9}{2}$	0.025	4.01	
	60-73	1 ✓	13.00	$\frac{5.9+5.8}{2}$	0.025	1.80	
	cross road 0-30	1 ✓	30.00	$\frac{5.2+5.5}{2}$	0.025	4.01	
	30-60	1 ✓	30.00	$\frac{5.5+5.4}{2}$	0.025	4.09	
	60-63.5	1 ✓	3.50	$\frac{5.4+5.3}{2}$	0.025	0.47	
	cross road 0-30	1 ✓	30.00	$\frac{4.9+5.4}{2}$	0.025	3.86	
	30-60	1 ✓	30.00	$\frac{5.4+5.8}{2}$	0.025	4.80	

Serial No.....

Name of work.....

Name of Contractor of nature.....

Date of commencement of work.....

Date	Full description, etc
1	2

Shadappalaya
connecting Balaji
temple

OK

th	Depth 6	Contents 7	Reference to last Measurement 8
1.6	0.025	3.37	
1.5	0.025	3.28	
1.8	0.025	3.86	
1.9	0.025	4.01	
1.2	0.025	1.30	
1.5	0.025	4.01	
1.4	0.025	4.09	
1.3	0.025	0.47	
1.4	0.025	3.86	
1.8	0.025	4.80	

M.A.R. 57 (Rule 116)

Measurement Book

No. A/11

193306

Serial No.....

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	60-65-80	1	5.80	$\frac{5.8+5.9}{2}$	0.025	1.85	
	cross road 0-30	1	30.00	$\frac{4.2+5.8}{2}$	0.025	3.75	
	30-56.00	1	26.00	$\frac{5.8+6.00}{2}$	0.025	3.84	
	cross Road. 0-30	1	30.00	$\frac{5.0+5.3}{2}$	0.025	3.26	
	30-60	1	30.00	$\frac{5.3+5.0}{2}$	0.025	3.87	
	60-74.00	1	14.00	$\frac{5.0+4.65}{2}$	0.025	1.79	
	Bhadrapal layout connecting Balaji road	1	50.00	$\frac{5.8+5.5}{2}$	0.025	4.24	

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	30-60	1 ✓	30.00	$\frac{5.5+5.1}{2}$	0.025	3.98	
	60-88	1 ✓	28.00	$\frac{5.1+4.8}{2}$	0.025	3.42	
	Babaji layout 0-30	1 ✓	30.00	$\frac{6.4+6.2}{2}$	0.025	4.43	
	30-60	1 ✓	30.00	$\frac{6.2+6.0}{2}$	0.025	4.58	
	60-90	1 ✓	30.00	$\frac{6.0+5.4}{2}$	0.028	4.28	
	90-120	1 ✓	30.00	$\frac{5.4+5.8}{2}$	0.025	4.20	
	120-150	1 ✓	30.00	$\frac{5.8+5.5}{2}$	0.025	4.24	
	150-180	1 ✓	30.00	$\frac{5.5+5.6}{2}$	0.025	4.16	
	180-209.2	1 ✓	29.20	$\frac{5.6+5.6}{2}$	0.025	4.03	
	Babaji layout 0-30	1 ✓	30.00	$\frac{5.3+5.1}{2}$	0.025	3.90	

Serial No.....

Name of work.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Number 3
	30-60	1
	60-90	1
	90-120	1
	120-1280	1
	Babaji layout 0-30	1
	with main connecting	
	6 lanes to Naga	30-60
	Shetty halli	60-90
	Road	

BOOK

ons		Contents 7	Reference to last Measurement 8
Breadth 5	Depth 6		
$\frac{5.5+5.1}{2}$	0.025	3.98	
$\frac{5.1+4.8}{2}$	0.025	3.42	
$\frac{5.4+6.2}{2}$	0.025	4.78	
$\frac{5.2+6.0}{2}$	0.025	4.58	
$\frac{6.0+5.4}{2}$	0.025	4.28	
$\frac{5.4+5.8}{2}$	0.025	4.20	
$\frac{5.8+5.5}{2}$	0.025	4.24	
$\frac{5.5+5.6}{2}$	0.025	4.16	
$\frac{5.6+5.4}{2}$	0.025	4.03	
$\frac{5.3+5.1}{2}$	0.025	3.90	

M.A.R. 57 (Rule 116)

Measurement Book

No. A/11

193307

Serial No.....

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	30-60	1 ✓	30.00	$\frac{5.1+6.6}{2}$	0.025	4.39	
	60-90	1 ✓	30.00	$\frac{6.6+6.4}{2}$	0.025	4.88	
	90-120	1 ✓	30.00	$\frac{6.4+6.8}{2}$	0.025	4.95	
	120-1260	1 ✓	6.00	$\frac{6.8+7.00}{2}$	0.025	1.04	
	Babaji lay out 0-30	1 ✓	30.00	$\frac{5.1+4.9}{2}$	0.025	3.75	
	main connecting 30-60	1 ✓	30.00	$\frac{4.9+4.8}{2}$	0.025	3.64	
	6 users to Naya 60-90	1 ✓	30.00	$\frac{4.8+5.4}{2}$	0.025	3.83	
	sketchy halli Road						

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	30-120	1 ✓	30.00	$\frac{5.4+6.4}{2}$	0.025	4.43	
	120-128.4	1 ✓	8.40	$\frac{6.4+7.2}{2}$	0.025	1.43	
	Balaji layout 4th 0-30	1 ✓	30.00	$\frac{5.2+6.2}{2}$	0.025	3.75	
	30-59.50	1 ✓	29.50	$\frac{4.8+5.5}{2}$	0.025	5.24	
	Balaji layout 4th 0-30	1 ✓	30.00	$\frac{6.2+5.8}{2}$	0.025	4.50	
	30-60	1 ✓	30.00	$\frac{5.8+6.2}{2}$	0.025	4.50	
	60-90	1 ✓	30.00	$\frac{6.2+6.3}{2}$	0.025	4.63	
	90-120	1 ✓	30.00	$\frac{6.3+6.0}{2}$	0.025	4.61	
	120-150	1 ✓	30.00	$\frac{6.0+6.1}{2}$	0.025	4.54	
	150-180	1 ✓	30.00	$\frac{6.1+6.50}{2}$	0.025	4.73	

Serial No.....

Name of work.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Number 3
	150-195.5	1 ✓
	muneshwarappa Block	1 ✓
	(opp sainik center) 30-60	1 ✓
	60-90	1 ✓
	90-120	1 ✓
	120-150	1 ✓
	150-180	1 ✓

T BOOK

Dimensions		Contents 7	Reference to last Measurement 8
Breadth 5	Depth 6		
$\frac{5.4+6.4}{2}$	0.025	4.43	
$\frac{6.4+7.2}{2}$	0.025	1.43	
$\frac{5.2+6.2}{2}$	0.025	3.75	
$\frac{4.8+5.5}{2}$	0.025	5.24	
$\frac{6.2+5.8}{2}$	0.025	4.50	
$\frac{5.8+6.2}{2}$	0.025	4.50	
$\frac{6.2+6.3}{2}$	0.025	4.63	
$\frac{6.3+6.0}{2}$	0.025	4.61	
$\frac{6.0+6.1}{2}$	0.025	4.54	
$\frac{6.1+6.8}{2}$	0.025	4.73	

M.A.R. 57 (Rule 116)

Measurement Book

No. A/11

193308

Serial No.

Name of work.....From.....To.....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	150-195.5	1	12.50	$\frac{6.5+7.4}{2}$	0.025	2.17	
	muneshwarce Block	1	30.00	$\frac{5.8+5.1}{2}$	0.025	4.09	
	(opp sinker & bar) 30-60	1	30.00	$\frac{5.1+4.8}{2}$	0.025	3.71	
	60-90	1	30.00	$\frac{4.8+5.5}{2}$	0.025	3.86	
	90-120	1	30.00	$\frac{5.5+5.7}{2}$	0.025	4.20	
	120-150	1	30.00	$\frac{5.7+5.3}{2}$	0.025	4.13	
	150-180	1	30.00	$\frac{5.3+5.5}{2}$	0.025	4.05	

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	180-210	1 ✓	30.00	$\frac{5.5+5.4}{2}$	0.025	4.08	
	210-240	1 ✓	30.00	$\frac{5.4+5.6}{2}$	0.025	4.13	
	240-270	1 ✓	30.00	$\frac{5.6+5.8}{2}$	0.025	4.28	
	270-300	1 ✓	30.00	$\frac{5.8+5.9}{2}$	0.025	4.39	
	300-330	1 ✓	30.00	$\frac{5.9+5.7}{2}$	0.025	4.35	
	330-360	1 ✓	30.00	$\frac{5.7+5.4}{2}$	0.025	4.16	
	360-390	1 ✓	30.00	$\frac{5.4+5.5}{2}$	0.025	4.09	
	390-396	1 ✓	6.00	$\frac{5.5+5.5}{2}$	0.025	0.83	
	Munghewara black clay road	1 ✓	30.00	$\frac{5.6+5.2}{2}$	0.025	3.98	
	30-60	1 ✓	30.00	$\frac{5.2+5.3}{2}$	0.025	3.94	

Serial No.....

Name of work.....

Name of Contractor of nature of

Date of commencement of work

Date	Full description, etc, of work
1	2
	60-
	90-1
	120-
	150-
	180-
	210-
	240-
	270-

MENT BOOK

Dimensions			Contents 7	Reference to last Measurement 8
Length 4	Breadth 5	Depth 6		
5.5+5.4 <u>2</u>	0.025	4.08		
5.4+5.6 <u>2</u>	0.025	4.13		
5.6+5.8 <u>2</u>	0.025	4.28		
5.8+5.9 <u>2</u>	0.025	4.39		
5.9+5.7 <u>2</u>	0.025	4.35		
5.7+5.4 <u>2</u>	0.025	4.16		
5.4+5.5 <u>2</u>	0.025	4.04		
5.5+5.5 <u>2</u>	0.025	0.83		
5.4+5.2 <u>2</u>	0.028	3.98		
5.2+5.3 <u>2</u>	0.028	3.94		

M.A.R. 57 (Rule 116)

Measurement Book

No. A/11

193309

Serial No.....

Name of work.....From.....To.....

Name of Contractor or nature of Agency.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	60-90	1	30.00	5.3+4.9 <u>2</u>	0.025	3.83	
	90-120	1	30.00	4.90	0.025	3.68	
	120-150	1	30.00	4.9+5.3 <u>2</u>	0.025	3.83	
	150-180	1	30.00	5.3+5.5 <u>2</u>	0.025	4.05	
	180-210	1	30.00	5.5+5.6 <u>2</u>	0.025	4.16	
	210-240	1	30.00	5.6+5.2 <u>2</u>	0.025	4.28	
	240-270	1	30.00	5.8+5.9 <u>2</u>	0.025	4.39	

MEASUREMENT BOOK

Date 1	Full description, etc, of work 2	Dimensions				Contents 7	Reference to last Measurement 8
		Number 3	Length 4	Breadth 5	Depth 6		
	270-285.50	1	16.50	5.90	0.025	2.43	
	Desinagere 0-14.80 (opp to Rm cluster)	1	14.80	6.5+6.6 2	0.025	2.43	
	0-30	1	30.00	3.2+4.4 2	0.025	2.85	
	30-60	1	30.00	4.4+4.2 2	0.025	3.45	
	60-91	1	31.00	4.8+5.3 2	0.025	3.91	
				total		329.13 cm	
				@ Rs 88 29.00/cm			29,05,889.00
				total		Rs 77,92,437.00	
				Add KRIDL charges 11%		Rs 8,57,168.00	
				Grand total		Rs 86,49,605.00	

CBICP
30/5/2013
M. V. (M. V.)

W. 007
30/5

Serial No.....

Name of work.....

Name of Contractor of nature of Ag.....

Date of commencement of work.....

Date 1	Full description, etc, of work 2
	Sketch! - Bhadrapur lay out mammithingera
	↑ road Bhadrapur
	W. 007 30/5